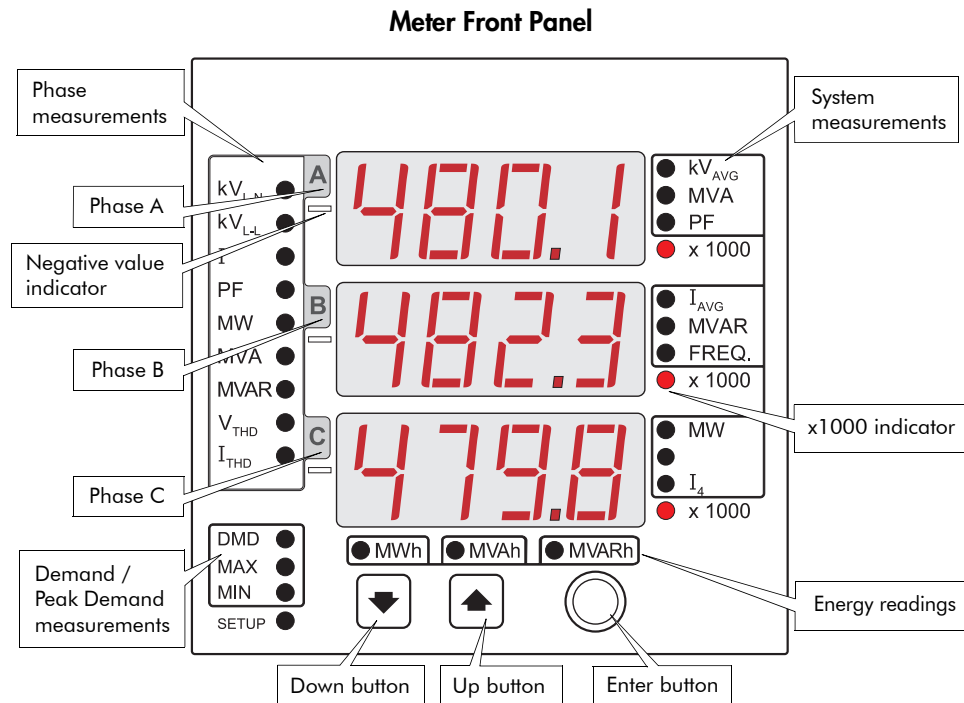


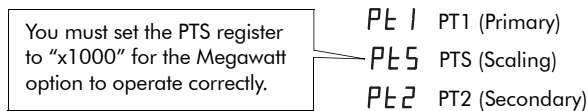
## 9200™ Megawatt Option

The Megawatt option displays all power and energy values in millions (e.g. megawatts) and volts in thousands (kilovolts), using a different front panel faceplate than the standard meter, with labels for kV, MW, MVA, MVAR, MWh, MVAh, and MVARh.



### Using the Megawatt Option

In addition to setting up the PT1 and PT2 registers on your Megawatt meter, you must set the PTS (PT Scaling) register to "x1000." This allows communications software to correctly interpret megawatt and kilovolt quantities, and enables meaningful measurements through the meter front panel.



To learn about meter configuration, refer to the *9200 Installation and Operation Guide*, available on the Siemens web site.

## What Does the PT Scaling (PTS) Setup Register Do?

The PT Scaling setup register provides an additional PT primary register to accommodate a larger PT ratio. PTS offers a “x1000” quantity for the PT primary register. The standard meter model uses the “x1” default scaling.

### How PT Scaling Defines the PT Ratio

Suppose that a meter with the Megawatt option is used to measure power on a 500 kV system, the voltage applied to the PT primary is 288 kV, and the expected voltage on the PT secondary is 120 V. The formula below shows how these values are used with the PT Scaling register set at “x1000” to define the overall PT ratio.

$$\begin{aligned} \text{PT Ratio} &= \frac{\text{PT Primary}}{\text{PT Secondary}} \longrightarrow \frac{\text{PT1} \times \text{PTS}}{\text{PT2}} \\ \text{PT Ratio} &= \frac{288,000}{120} \longrightarrow \frac{288 \times 1000}{120} \end{aligned}$$

The formula shows that the meter correctly measures 288.0 kV when PTS is set to “x1000,” PT1 is set to 288, and PT2 is set to 120.

### Additional Information

- ◆ *9200 Installation and Operation Guide*
- ◆ *9200 Modbus Protocol* document